# The Natural State Scribe

Spring 2006

## A few words from the editor...

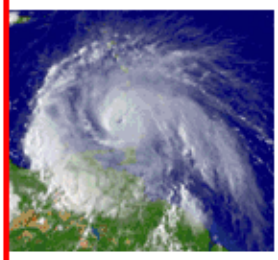
Over the past year or so, weather stories seemed to have made both the local and national headlines with an increasing frequency. While Hurricane Katrina grabbed most of the attention, Arkansas and our neighbors have also felt the wrath of Hurricane Rita, strong tornadoes, large hail, winter storms, a lingering drought and even large and destructive wild-fires.

Be assured that no matter what Mother Nature may throw our way, your National Weather Service is on the job. The North Little Rock office, along with every other NWS office in the country, is open 24 hours a day, 7 days a week with a staff of meteorologists trained to keep you safe no matter where you venture in the Unites States and its territories.

**Joe Goudsward**

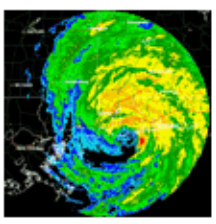
## Hurricane retirees and 2006 names

Hurricane Katrina will never hit the Gulf Coast again. In fact, neither will hurricanes Dennis, Rita, Stan or Wilma as all these names were retired following the record



setting 2005 hurricane season. With the retiring of these names, the number of retired names now totals 67. A hurricane name is usually retired when it causes a large loss of life or property or be-cause of sensitivity reasons. Names may also be retired to establish distinction in the scientific and /or legal communities. The names for this upcoming season are:

| | | |
|---|---|---|
| Alberto | Joyce | Tony |
| Beryl | Kirk | Valerie |
| Chris | Leslie | William |
| Debby | Michael | |
| Ernesto | Nadine | |
| Florence | Oscar | |
| Gordon | Patty | |
| Helene | Rafael | |
| Isaac | Sandy | |



Summer begins June 21 at 7:26 a.m. Central Time.

*"There is really no such thing as bad weather, only different kinds of good weather"*

John Ruskin

*"Some people are weather wise, but most are otherwise."*

Benjamin Franklin

### Inside this issue:


| | |
|---|---|
| The New EF Scale | 2 |
| Hurricane Season | 4 |
| New Climate | 6 |
| Firestorm | 8 |
| Hail Storm! | 10 |
| Summer Outlook | 12 |
| Coop Corner | 13 |
| Summer Search | 14 |
| Internet Update | 15 |
| Spotting Tips | 17 |
| Reporting Severe | 18 |
| Grand Finale | 19 |

# Spring 2006

## The Enhanced F Scale (EFScale)

Joe Goudsward

The National Weather Service has announced plans to implement the Enhanced Fujita Scale to rate tornadoes and replace the original Fujita (F) Scale. The EF Scale will continue to rate tornadoes on a scale from zero to five, but ranges in wind speed will be more accurate with the improved rating scale. The new EF Scale is expected to be fully implemented by February 2007. The EF Scale takes into account additional variables which will provide a more accurate indication of tornado strength and will provide more detailed guidelines that will allow the National Weather Service to more accurately rate tornadoes that strike in the United States.

The F Scale was developed in 1971 by Dr. T. Theodore Fujita to rate tornadoes and estimate associated wind speed based on the damage they cause. The EF Scale refines and improves the original scale. It was developed by the Texas Tech University Wind Science and Engineering Research Center, along with a forum of wind engineers, universities, private companies, government organizations, private sector meteorologists and National Weather Service meteorologists from across the country.

Limitations of the original F Scale may have led to inconsistent ratings, including possible overestimates of associated wind speeds. The EF Scale incorporates more damage indicators and degrees of damage than the original F Scale, allowing more detailed analysis and better correlation between damage and wind speed. Twenty eight Damage Indicators (DI) will be used in the new system with Degrees of Damage (DOD) to determine wind estimates. Different types of buildings, depending on building materials, will have their own DI's and DOD's.

The original F Scale historical data base will not change. An F5 tornado rated years ago is still an F5, but the wind speed associated with the tornado may have been somewhat less than previously estimated. A correlation between the original F Scale and the EF Scale has been developed. This makes it possible to express ratings in terms of one scale to the other, preserving the historical database .

Since the new system will still use actual tornado damage to estimate the storm's wind speed, the National Weather Service states that the new scale will likely not lead to an increase in a number of tornadoes classified as EF5 (the lower wind speed ranges have been adjusted as better estimates of what is needed to incur the damage). The upper bound of the wind speed range for EF5 is open — in other words, there is no maximum wind speed designated.

# Spring 2006

## The Enhanced Fujita (EF) Scale

| Category | Wind Speed | Potential damage |
|---|---|---|
| EF0 | 65-85 mph | Light damage |
| EF1 | 86-110 mph | Moderate damage |
| EF2 | 111-135 mph | Considerable damage |
| EF3 | 136-165 mph | Severe damage |
| EF4 | 166-200 mph | Devastating damage |
| EF5 | > 200 mph | Incredible damage |

## The one and only...

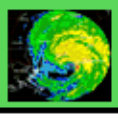
As you can imagine, an F5 tornado is a very rare event. While Arkansas sees an average of 26 tornadoes a year, only one twister in our state's history has been classified as an F5. This tornado, now known as the Sneed tornado, tracked through northeast sections of the state on April 10th, 1929. When it was finally over, the death toll was listed at 23, with another 59 people injured. Some of the injuries were quite severe, including skull fractures. The tornado reached its maximum strength as it moved through the community


of Pleasant Valley and then on through the community of Sneed. Both of these communities, located about 2.5 to 3 miles north of Swifton, were virtually destroyed. Historical accounts indicate the tornado was 1/2 mile wide at this point. The tornado then weakened and passed just to the southeast of Alicia. Pleasant Valley was located on what is now Jackson County road 72 while Sneed was located on what is now Jackson

# Spring 2006

## 2006 Hurricane Season Outlook

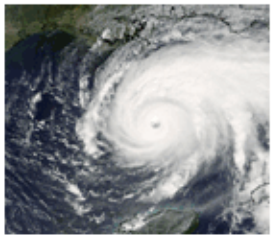
Joe Goudsward



The names remain etched in our memories, Camille, Hugo, Andrew and now we can add the names Katrina, Rita and Wilma to the list of devastating hurricanes to strike the United States Coast. The 2006 hurricane season is rapidly approaching and once again we will watch the tropics for signs of development.

Hurricane Katrina

The hurricane season officially runs from June 1st to November 30th with September and October being the peak months for tropical systems to wreak their havoc along the Gulf Coast. Once again it looks like a very active tropical season is in the cards with more than the usual number of storms being predicted. The 2005 season was one for the record books with 28 named storms in the Atlantic Basin. In fact, it was the first time we ran out of names for storms and had to fall back on the Greek Alphabet.



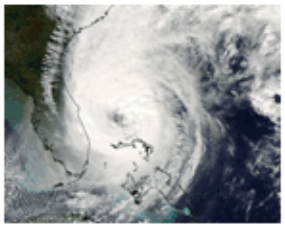
Hurricane Rita

The Tropical Prediction Center has just issued their latest official outlook for the 2006 tropical season and the numbers are daunting to say the least.

The official 2006 Atlantic hurricane season outlook is indicating an 80% chance of an above-normal hurricane season, a 15% chance of a near normal season and only a 5% chance of a below normal season.

The outlook calls for 13 to 16 named storms with 8 to 10 hurricanes and 4 to 6 major hurricanes. This prediction indicates a continuation of above normal activity that has been occurring for the past decade. However, a repeat of last years record breaking season is not expected.

As far as timing is concerned, the majority of named storms are expected to form during the August to October time frame. These systems usually track westward towards the Caribbean Sea and/or the United States as they gain strength. On average during these active years, 2-4 hurricanes will make landfall in the continental United States and 2-3 in the Caribbean Sea.



Hurricane Wilma

These numbers are based on a variety of factors including the temperature of the ocean where hurricanes form, the effects of el nino and climatology and are always subject to change. The Saffir-Simpson scale is a measure of how intense a hurricane gets and the damage it can inflict. Please refer to the following page.

# Spring 2006

## The Saffir-Simpson Scale

| Category | Wind Speed | Storm Surge | Potential damage |
|---|---|---|---|
| One | 75-95 mph | 4-5 ft above normal | Damage primarily to unanchored mobile homes, shrubbery, and trees. Some damage to poorly constructed signs. Also, some coastal road flooding and minor pier damage. |
| Two | 96-110 mph | 6-8 ft above normal | Some roofing material, door, and window damage of buildings. Considerable damage to shrubbery and trees with some trees blown down. Considerable damage to mobile homes, poorly constructed signs, and piers. Small craft break moorings. |
| Three | 111-130 mph | 9-12 ft above normal | Some structural damage to small residences . Foliage blown off trees and large trees blown down. Mobile homes and poorly constructed signs are destroyed. Flooding near the coast destroys smaller structures with larger structures damaged by battering from floating debris. |
| Four | 131-155 mph | 13-18 ft above normal | More extensive structure failure with some complete roof structure failures on small residences. Shrubs, trees, and all signs are blown down. Complete destruction of mobile homes. Extensive damage to doors and windows. Major damage to lower floors of structures near the shore. |
| Five | >155 mph | > 18 ft above normal | Complete roof failure on many residences. Some complete building failures. All shrubs, trees, and signs blown down. Complete destruction of mobile homes. Severe and extensive window and door damage. Major damage to lower floors of all structures located less than 15 ft above sea level |

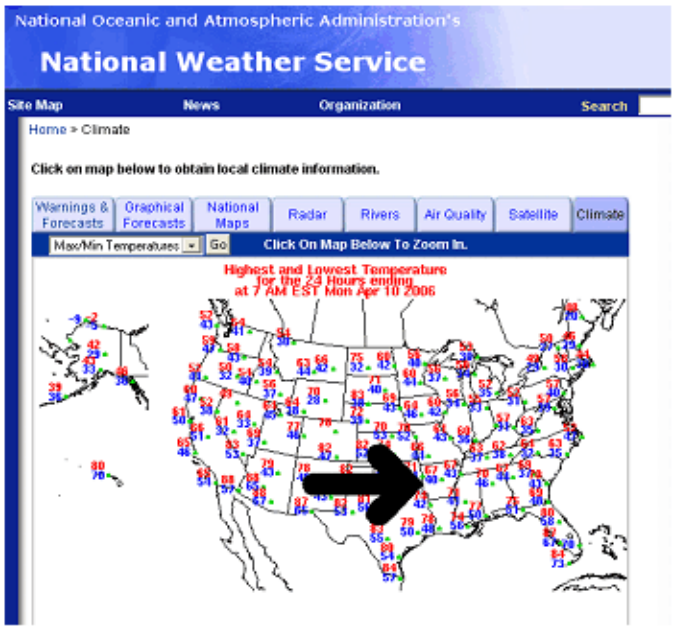
# Spring 2006

## New Climate Web Pages

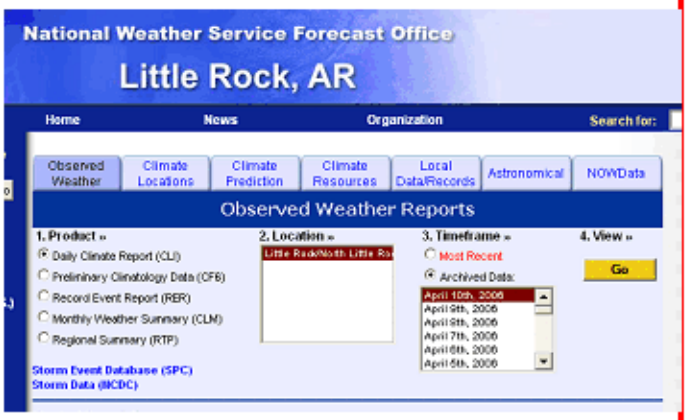
Brian Smith

While browsing our website looking for climate data, you may have noticed that something looks a little different. Late last fall, the new web climate interface debuted nationally on all NWS office websites. This new interface holds an archive of extensive weather and climate information for many sites in our county warning and forecast area.

There are two ways of accessing this data. From our main page, click on "Local" under the "Climate" links section. Or, from the NWS main page, click on the "Climate" tab, and then on the center of Arkansas .

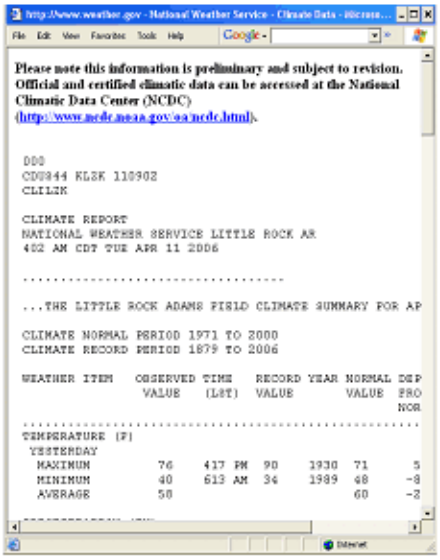




The new page is easy to navigate. Simply choose the product you would like to view or print in column 1, select the location in column 2, then the date in column 3, and finally, select "Go".




Another window will appear with the data you requested. It's that simple to use!

In addition to daily climate summaries for Little Rock and North Little Rock, monthly data consisting of daily highs, lows, and rainfall is available for many more locations. In column 1, simply choose "Preliminary Climatology Data", and in column 2 select the location you wish to view. In column 3, select either the most recent, or an archived month. Most stations have on-line data back to 2001.



Please note this information is preliminary and subject to revision. Official and certified climatic data can be accessed at the National Climatic Data Center (NCDC) (http://www.ncdc.noaa.gov/oa/ncdc.html).

```
000
CDUS44 KLZK 110902
CLILZK

CLIMATE REPORT
NATIONAL WEATHER SERVICE LITTLE ROCK AR
402 AM CDT TUE APR 11 2006

.....

...THE LITTLE ROCK ADAMS FIELD CLIMATE SUMMARY FOR AP

CLIMATE NORMAL PERIOD 1971 TO 2000
CLIMATE RECORD PERIOD 1879 TO 2006

WEATHER ITEM   OBSERVED TIME   RECORD YEAR NORMAL DEP
                VALUE   (LST)  VALUE       VALUE  FRO
                                                   NOR
.....
TEMPERATURE (F)
 YESTERDAY
  MAXIMUM        76    417 PM  90    1930  71      5
  MINIMUM        40    613 AM  34    1989  48     -8
  AVERAGE        58                        60     -2
```

# Spring 2006

## New Climate Web Pages

continued

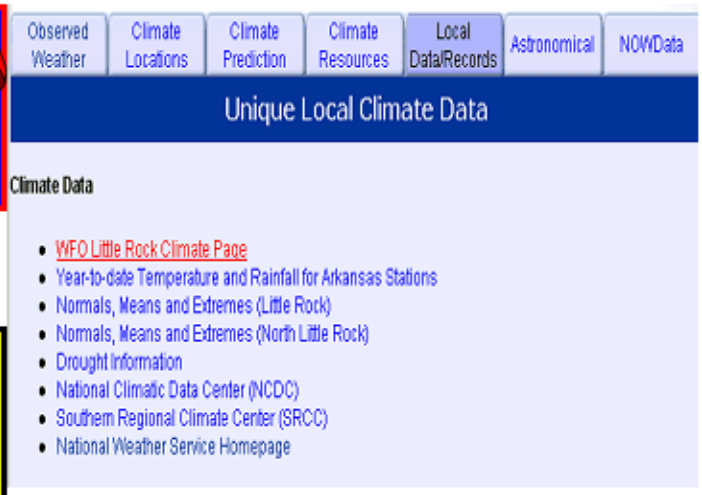
Data for the following stations are available through the new climate web interface.

| | | |
|---|---|---|
| Little Rock | North Little Rock | Harrison |
| Monticello | Mountain Home | Searcy |
| Russellville | Mount Ida | Hot Springs |
| Pine Bluff | Flippin | Stuttgart |
| | Batesville | |

These new web pages are part of a national standardization in the NWS, which allows for an easier transition between individual office websites. However, if you're still looking for a little more Arkansas specific data, our traditional climate webpage is still accessible.


On our main page, under the "Climate" selections, choose "More". When the next page appears, click the link in the example at the top of the next column.

This will take you back to our traditional WFO climate page.




If you have any questions or comments about the new climate pages, you can email me at brian.d.smith@noaa.gov , or John Lewis, our webmaster, at John.Lewis@noaa.gov .

## Did you know?

- Flooding causes on average, almost 3.5 billion dollars in damages and over 100 lives lost per year in the U.S.?
- Three fourths of all presidential disaster declarations are associated with some kind of flooding?
- As little as two feet of water moving only 6 mph can cause most cars to be swept away?

# Spring 2006

## Firestorm

Joe Goudsward

As we are all aware of, most of Arkansas has been unusually dry for the past year or so. The results have ranged from low lakes and rivers to poor crop yields. One effect of the drought we do not often think about is wildfires. The majority of the fires that do occur in Arkansas are relatively small by Western United States standards but that is not always the case. Just this year alone a 10,000 acre fire burned in Montgomery County and 5100 acres were charred in Garland and Perry Counties from a single wild fire.


In fact, when the number of fires on both state-owned and federal land are combined, the numbers start to add up. Since the start of 2005 through April 15th of this year, nearly 4000 wildfire have been reported. The total acres burned are in excess of 61,000 and the suppression cost has exceeded 6 million dollars.

The National Weather Service offers a wide range of services for land management agencies to plan for or fight these fires ranging from routine fire weather forecasts, to site specific "spot" forecasts. In some cases, we will send a meteorologist to the fire site to assist in suppression efforts. The IMET (Incident Meteorologist) is a NWS meteorologist who has received specialized training in fire behavior, small scale forecasting and fire operations. They are often dispatched to remote areas to provide support for fire fighting efforts. There are roughly 60 IMETs nationwide. I am proud to be the IMET for the Little Rock National Weather Service forecast office.


With the limited number of IMETs available, we are often sent out of state to support fire fighting efforts. This has been the case for several months now in Texas as large and destructive wildfires have swept across the Lone Star State since Christmas of 2005. The National Weather Service has supported the ongoing fire planning and fire fighting efforts since that time. With a state as vast as Texas and with such varying topography, the job requires two IMETs working together to get the job done. I had the privilege of working with the Texas Forest Service on two separate occasions in this massive undertaking which included two week dispatches in both January and March.

While Arkansas has put up some impressive fire numbers, they pale in comparison to the number of fires, the acres burned and the number of structures lost in Texas.

# Spring 2006

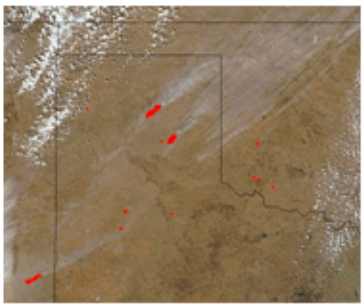
## Firestorm

Joe Goudsward

Since the first of the year, a total of 10,674 wildfires have been reported across Texas consuming over 1.5 million acres or an area roughly the size of the state of Rhode Island. These wildfires have destroyed 661 buildings while the heroic efforts of fire fighters from around the nation have saved 13,815 buildings, mainly homes and businesses. Several small towns were completely burned over and others have come dangerously close.

The culprit for these fires are low pressure systems that form in the lee of the Rocky Mountains. These storms are usually lacking moisture and only produce strong winds, often in excess of 40 to 50 mph. Often times these storms will produce lightning which leads to new fire starts but no rain. When these strong winds blow on the parched land, any fire will quickly grow.

The worst fire day in the state's history was March 12 of this year. This was during one of my dispatches and while we were all expecting a very bad fire weather day, what ended up occurring no one could have been prepared for. Strong southwest winds in excess of 60 mph developed over the Texas Panhandle during the afternoon hours. These winds blew over power poles that ignited two huge grass fire just east of Amarillo. With winds this strong, fire fighting efforts were useless and all that could be done was to get people out of the way of the ensuing firestorm. The fires burned so hot that they showed up on heat-recording satellite pictures the next day (see left).



When it was all said and done 5 days later, nearly 1 million acres had been charred. While several buildings were lost and the fire did encroach upon many towns, suppression efforts from both the air and ground prevented a much greater tragedy. Still, seven lives were lost and numerous head of cattle were killed.

Parts of east and south Texas continue to green up and the fire threat has diminished in these areas. However, western Texas and particularly the Panhandle remain susceptible for more wildfires until substantial rain is seen. The NWS will continue to support the efforts of Texas forest officials for as long as we are needed.

# Spring 2006

## Hail Storm!

Joe Goudsward

Early April 2006 will be remembered not only for destructive tornadoes that swept across Arkansas, but also for monster-sized hail that rained down from the sky.

Supercell (cells with rotating updrafts) thunderstorms developed early in the evening of April 2nd.


*2 Miles North of Searcy*

Conditions that were perfect for hail formation came together and the result was hail in excess of four to five inches falling over parts of Baxter, White, Desha, Arkansas and Fulton counties. To put it in perspective, these hailstones were roughly the size of grapefruits or softballs. This is some of the largest hail ever to fall in the state of Arkansas or anywhere else for that matter. Many other reports of hail ranging from the size of golf balls to tennis balls to baseballs were common.

Needless to say, damage was widespread across parts of Arkansas with numerous reports of windshields smashed, windows broken and roofs destroyed. Damage estimates were in the hundreds of thousands of dollars.

The costliest hailstorm in the United States was in the Dallas-Forth Worth area on May 15, 1995 with damage over $1 billion. The largest hailstone ever recorded fell on the lawn of a resident in the town of Aurora, Nebraska on the evening of June 22nd, 2003. This huge stone left a impact crater and measured a whopping 7 inches in diameter. It had a circumference of almost 19 inches and weighed close to a pound and a half.


*Largest hailstone ever*

Hail is produced in almost every thunderstorm and the size of the hail is dependent on the size of the storm. How does hail form you ask? Hail is created when tiny drops of water get caught in the updraft of the storm.

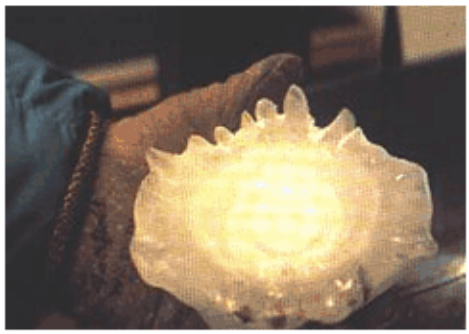
Continued

# Hail Storm!

continued

These droplets are lifted higher and higher into the storm cloud until they freeze into ice and begin to fall. The size of the hail is dependent upon the strength of the storm. If the smaller hailstone gets caught in the updraft of the storm again, it gets more water on it. The stone is lifted back up into the sub-freezing layer of the cloud where the water freezes again. If this happens over and over, the hailstone will continue to grow. Once the hailstone becomes too heavy to be supported by the updraft of the storm, it falls to earth.

For the smallest hailstone to form, an updraft of around 24-34 mph is required. Larger sized stones such as golf-ball size, require updrafts of around 55 mph to form. Softball-size hail involves updrafts exceeding 100 mph.



If you cut open a hail stone, you can count the number of trips up and down in the storm the hailstone made by counting the number of rings inside the stone, just like rings tell the age of a tree.

Smaller hailstones will often appear smooth while very large hailstones will often appear more jagged or irregular. Also, smaller hailstones can smash together into a bigger stone.

Large hail can still cause injuries, mainly cuts, bruises and broken bones. While fatalities are rare, hail-related losses often top a billion dollars a year, mainly to crops, livestock, cars and roofs. The last reported death in the United States occurred in March, 2000 in Lake Worth Village, Texas. The most deadly hailstorm on record occurred in India on April 30, 1888, killing 246 people and 1600 animals.

If you do happen to find yourself in a hailstorm, get into a sturdy building and stay away from windows. A vehicle will offer good protection from hailstones up to about the size of golf balls. If you are caught outside, try to cover your head as best you can. A table to estimate hail size against common everyday objects is found on page 17. As always, give us a call when large hail falls or any damage occurs.

# Spring 2006

## Summer Outlook

Joe Goudsward

The latest summer outlook (June, July and August) from the Climate Prediction Center shows increased chances for above normal temperatures across a good portion of the southern and western United States. Across the Natural State, there is also an increased chance for temperatures being above normal this summer but only across the extreme South. Elsewhere, there are equal chances for above, below or normal temperatures meaning overall, summer looks pretty average.

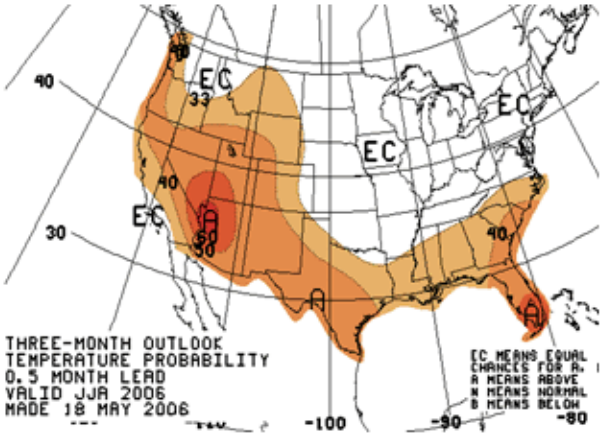



*Figure 1—Summer Temperature Outlook*

As far as precipitation is concerned, there are equal chances this summer that rainfall will be at, above or below normal. When this outlook is combined with the temperature outlook, it appears that the summer season will be pretty typical with warm temperatures and the only rain in the form of late day thunderstorms.

Cold fronts often have a difficult time moving across the Mid South during the summer season as upper level high pressure usually dominates.

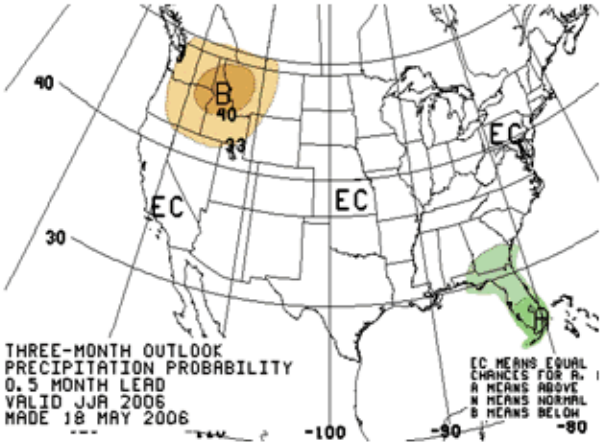



*Figure 1—Summer Precipitation Outlook*

Taking a look at some historical data for the Little Rock area shows the average high temperature for the season is 91.3 degrees while the average low temperature is 70.1 degrees with an average daily temperature of 80.7 degrees. Average rainfall is 10.19 inches and the hottest day recorded in the capital city was 112 degrees on July 31, 1986. The three warmest, coldest, (based on average temp), wettest and driest summers are listed below:

| Top three Hottest | Top three Coldest |
|---|---|
| 1. 1954 - 85.41° | 1. 1903 - 76.90° |
| 2. 1980 - 84.81° | 2. 1889 - 76.94° |
| 3. 1998 - 84.72° | 3. 1915 - 77.19° |

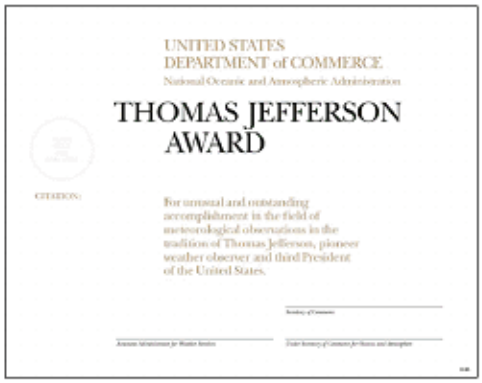
| Top three Wettest | Top three Driest |
|---|---|
| 1. 1888 - 22.16" | 1. 1930 - 0.78" |
| 2. 1971 - 20.29" | 2. 1980 - 1.71" |
| 3. 1895 - 19.34" | 3. 1954 - 2.23" |

# Spring 2006

## Coop Corner

**By Mike Reid**

Mr. Owen B. Hendrix of Antoine, Arkansas, was presented the distinguished Thomas Jefferson Award. The Jefferson Award is the highest honor given to Cooperative Weather Observers. Of the approximately 11,700 observers nationwide, the Jefferson Award is given annually to only 5 observers. Mr. Hendrix is the first observer given this award in the Little Rock County Warning Area.



UNITED STATES
DEPARTMENT of COMMERCE
National Oceanic and Atmospheric Administration

THOMAS JEFFERSON
AWARD

CITATION:

For unusual and outstanding accomplishment in the field of meteorological observations in the tradition of Thomas Jefferson, pioneer weather observer and third President of the United States.

The award ceremony was held at the rotunda of the Arkansas State Capitol building in Little Rock. Renee Fair, Meteorologist in Charge of the National Weather Service office in North Little Rock served as the emcee for the program. Distinguished speakers included Gus Wingfield, State Treasurer of Arkansas and cousin of Mr. Hendrix, Bill Proenza, Director of the National Weather Service Southern Region, John Robinson, Warning Coordination Meteorologist at the North Little Rock office, and Jimmy Russell, Observation Program Leader at the North Little Rock office.

Mr. Hendrix was also given the Dick Hagemeyer Award for 45 years as a Cooperative Weather Observer. Mr. Hendrix takes daily rainfall measurements and phones the totals to the National Weather Service office in North Little Rock. He also maintains an automated punch tape rain gage that measures rainfall in 15 minute increments. He removes the tape monthly and mails it to the National Weather Service. The Thomas Jefferson and Dick Hagemeyer Awards are a small token of our appreciation for his 45 years of continuous weather observations.

In the picture: Owen B. Hendrix (back row/fifth from right) personally received his awards on 03/04/2006. He was joined by friends, family, and staff members of the National Weather Service in North Little Rock. In addition to the Jefferson and Hagemeyer awards, Mr. Hendrix was also given a certificate naming him a Deputy Treasurer of Arkansas. The certificate was presented by his cousin, Arkansas State Treasurer Gus Wingfield.

# Spring 2006

## Summer Search

All of the hidden words in the puzzle are synonymous with the spring and summer seasons. Grab your pencil and see how many you can find !

G N I P M A C H L H U D S R E
X F A B I S H O X A I M I E D
A K U B Z N P T K T R K C N A
F T S C H O O L S O U T E O N
Z I F X H Z F I T U Y O C I O
B K R C G I J S T L Z O R T M
U A A E S A R P G A X S E I E
L E R H W E C A C W C T A D L
B X I B D O R K F N H A M N R
P N Y N E D R D C M D J V O H
G T U A E Q A K R O I Z T C U
O H X N I J U E S W M C V R B
T C I H A Z Y E Z E U M T I U
G N I M M I W S O R H R A A O
G M O S Q U I T O V I C K H F

AIR CONDITIONER
BARBEQUE
BEACH
CAMPING
FIREWORKS
FISHING
GARDENING
HAMMOCK
HAZY
HIKE
HOT
HUMID
ICE CREAM
LAWN MOWER
LEMONADE
MOSQUITO
SCHOOLS OUT
SWIMMING
THUNDERSTORMS
VACATION

# Spring 2006

## Internet Update...

John Lewis / Joe Goudsward

Since the mid-1990s, the National Weather Service in Little Rock has been providing weather information on the internet (http://www.srh.noaa.gov/lzk). In the beginning, there were only text products but there are now graphical products available and even information for wireless devices.

As far as the text products, the most popular among customers are forecasts. Those that have plans for tomorrow or a week from now access these products frequently. You can too at the following address...
http://www.srh.noaa.gov/lzk/html/wxcntl1.php

For those who are more interested in current weather conditions, there is an observations page available at...
http://www.srh.noaa.gov/lzk/html/wxcntl2.htm

Of course, watches and warnings are crucial when severe weather is expected or when storms are imminent. After all, the goal is to protect life and property. The local hazards page is at...
http://www.srh.noaa.gov/lzk/html/svrmain.php

And then there are those who are not looking for present or future data. They are searching for what happened in the past (yesterday's rainfall, record temperatures, etc.). Climate information is becoming increasingly more popular. To check it out, go to...
http://www.srh.noaa.gov/lzk/html/wxcntl3.htm

Here are some links to other valuable pages...

River and Lake Information
http://www.srh.noaa.gov/lzk/html/wxcntl4.htm

Fire Weather
http://www.srh.noaa.gov/lzk/html/forest2.htm

Aviation Weather
http://www.srh.noaa.gov/lzk/html/wxcntl7.htm

While weather information is readily available on the web, it is now also there for your cell phone or wireless device. Forecasts and radar images can be displayed. If interested, go to

HTTP Enabled Wireless Device
http://mobile.srh.weather.gov

WAP Enabled Wireless Device
http://www.srh.noaa.gov/wml

To put together text products, there used to be nothing more than typing and more typing. These days, there is far less typing and far

# Spring 2006

## Internet Update...

Continued

more creating. Forecasters envision what the future weather may hold, and then express it graphically. Once the graphics are constructed, they are shipped to the internet.

But it is much more than just graphics. If you could break a temperature graphic into pieces, you would have small areas no more than a few square miles. Each area, or grid point, would have its own temperature. The computer remembers not only the temperature for each grid point, but for other variables as well (such as wind and sky condition). With lots of grid points across Arkansas and the rest of the country, a national digital forecast database, or NDFD, is born. Customers can use the NDFD to get weather information for each grid point . It works kind of like the clickable map on the front page of the Little Rock website. When you click on a spot, data is extracted for that spot in the form of a 7 day forecast. Want to learn more about NDFD? Try these links...

Local Graphical Forecast Page
http://www.srh.noaa.gov/data/ifps/lzk/GFE/

NDFD
http://www.nws.noaa.gov/ndfd/

You may have noticed some new radar imagery on the web. With the new images, you have the ability to keep a flat black background, or overlay terrain features, rivers and highways. This new RIDGE (**R**adar **I**ntegrated **D**isplay with **G**eospatial **E**lements) radar is now available at every National Weather Service office's website.

**Surfing the web**

RIDGE Radar allows users to overlay the latest radar images and warnings over local maps that display topographical features, roads, rivers, cities and county boundaries. The display also includes distances between specific locations and the developing weather, as well as the ability to view an animated loop showing direction and velocity. The new system not only provides enhanced images, it helps the user understand exactly where they are located in relation to the storm system. The radar and warning images provide citizens with a heightened level of situational awareness that can help to save lives and reduce property damage.

For RIDGE Radar Pictures
http://radar.weather.gov/

# Spring 2006

## Spotting tips for estimating...

### Hail Size

| HAIL SIZE | DESCRIPTION |
|---|---|
| 1/4 inch | Pea Size |
| 1/2 inch | Plain M & M Candy |
| 3/4 inch | Penny Size |
| 7/8 inch | Nickel Size |
| 1 inch | Quarter Size |
| 1 1/4 inches | Half Dollar Size |
| 1 1/2 inches | Ping Pong Ball Size |
| 1 3/4 inches | Golf Ball Size |
| 2 inches | Lime Size |
| 2 1/2 inches | Tennis Ball Size |
| 2 3/4 inches | Baseball Size |
| 3 inches | Large Apple Size |
| 4 inches | Grapefruit Size |
| 5 inches | Computer CD Size |

### Wind Speed

| ESTI-MATE | DESCRIPTION |
|---|---|
| 25-31 mph | Large branches in motion; whistling heard in telephone wires |
| 32-38 mph | Whole trees in motion; inconvenience felt walking against the wind |
| 39-54 mph | Twigs break off trees; wind generally impedes progress |
| 55-72 mph | Damage to chimneys and TV antennas; pushes over shallow rooted trees |
| 73-112 mph | Peels surfaces off roofs; windows broken; light mobile homes pushed or overturned; cars pushed off road |
| 113-157 mph | Roofs torn off houses; cars lifted off ground; severe and widespread damage. |

### Rainfall amount and intensity

| | |
|---|---|
| Light | Ranging from scattered drops that do not completely wet an exposed surface regardless of duration to a condition where individual drops are easily seen; slight spray is observed over pavement; puddles form slowly; sound on roofs ranges from slow pattering to gently swishing; steady, small streams may flow in downspouts. Hourly accumulation of rain is up to .10 inches per hour with a six minute accumulation up to .01 inches. |
| Mod-erate | Individual drops are not clearly identifiable; spray is observable just above pavement and other hard surfaces; puddles form rapidly; downspouts on buildings are 1/4 to 1/2 full; sound on roofs ranges from swishing to a gentle roar. Hourly accumulation of rain is .11 to .30 inches per hour with a six minute accumulation of .01 to .03 inches. |
| Heavy | Rain seems to fall in sheets; individual drops are not identifiable; heavy spray to height of several inches is observed over hard surfaces; downspouts on buildings run more than 1/2 full; visibility is greatly reduced; sound on roofs re-sembles roll of drums or distant roar. Hourly accumulation of rain is greater than .30 inches per hour with a six minute accumulation of more than .03 inches. |

# Spring 2006

## Reporting Severe Weather Joe Goudsward

We here in Arkansas see some of the wildest weather around. Ranging from tornadoes to ice storms, with everything in between, Arkansans have experienced just about all Mother Nature can throw at us. The National Weather Service relies on a team of dedicated weather enthusiasts to report real time weather information to us. Our storm spotters are trained to recognize severe weather before and during its occurrence. While we use our spotter network extensively, we welcome any severe weather report.

It should be noted that severe weather is not just restricted to spring. Severe weather can and often does occur any time of the year.

We also covet reports of winter weather such as heavy snow or icing conditions. To provide real time reports, call your NWS in North Little Rock by using the following number:

**1-501-834-0308**

Please give your name and your location as precisely as you can. Please give the type of severe weather occurring, its location, the time you observed it, and its movement. The form below may be filled in and used if you so desire. Make numerous copies to use if you wish. You do not have to keep the form after you use it.

Please relay your report as soon as you can safely do so, it is needed in order to issue a new warning or monitor existing warnings in your area. Do not assume the National Weather Service already knows about it and therefore is not interested in your report. We are always looking for additional information. Yours is likely the first report of severe weather we may receive.

Additional reports are always appreciated in order to track the storm. If your report must be delayed, please pass it along as soon as you can. It is still very valuable. Simply put, if you observe severe weather, report it. If your report is more than 2 hours old, you can still call it in or file it on our Internet site:

**http://www.srh.noaa.gov/lzk**

Your Name_____

Your Location_____

Type of Storm_____

Location of Storm_____

Time of Storm_____

Movement of Storm_____

Damage_____

National Weather Service
Forecast Office
8400 Remount Road
North Little Rock AR, 72118
Phone: 501-834-0308

We would love to hear from you
Drop us a line, we are here
around the clock.


Visit us on the web !
www.srh.noaa.gov/lzk

**The *Natural State Scribe* is published twice a year by the National Weather Service Forecast office in North Little Rock, Arkansas. Please refer all comments and suggestions to Joe Goudsward, chief editor, at Joseph.Goudsward@noaa.gov**

**The following sources outside the National Weather Service were used in the assembling this publication:**

**Discovery School; 2005 Discovery Communications Company**
**The Weather Doctor: The Weather Doctor ©2006,**
**Wikipedia: Copyright (C) 2000,2001,2002 Free Software Foundation, Inc.**
**Arkansas Forestry Commission**
**Arkansas Oklahoma Interagency Coordination Center**
**Texas Interagency Coordination Center**